ABSTRACT OF THE DISCLOSURE

A technique for assigning an address ("shadow address") to a mobile station that is compatible with the layer-2 address on the wireline network which serves the mobile station. The shadow address is then used as a wireline identifier for the destination address for frames ultimately destined for the mobile station. The shadow address is stored in a watch list for serving base stations, and any base station receiving a frame with a shadow address in its watch list process the frame to forward it the to mobile station. In this way, the shadow address facilitates carrying out soft handoff and smooth handoff.